

### Overview

A local university is renovating its School of Education to reflect changes in curriculum, pedagogy, and learning modalities. Several of the larger classroom spaces will be redesigned as collaboration rooms where groups of students can meet to discuss joint projects before presenting them to the instructor and their classmates.

### Needs Assessment

As part of their tuition and fees, all students receive a campus-standard laptop computer with a common software suite. All laptops output an HDMI video signal with embedded audio. Students are expected to form peer groups of between four and six members, and to meet regularly to present their work for critique by other students within their group.

### System Requirements

Each collaboration room is equipped to support up to 10 teams. Six areas are to be equipped to support up to four student computers; the other four areas need to accommodate larger groups, with provision for as many as six student computers. All computer sources are digital, and all are switched to a single flat-panel display with an HDMI input. The display selected for the project is to have integrated speakers for audio amplification.



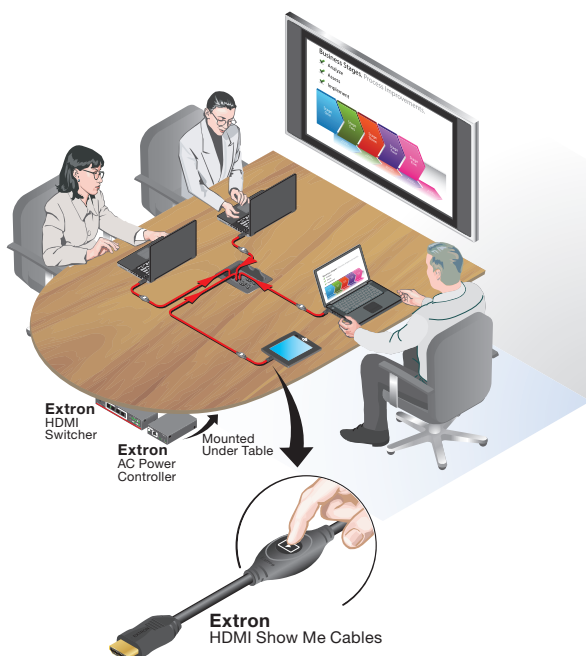
### TEAMWORK SOLUTION

The university designed a custom, all-digital **TeamWork® Collaboration System** that fits long-term classroom update plans. The TeamWork system accommodates each student's laptop, switching all video and corresponding audio signals to the main flat-panel display as **full resolution, full frame rate 1080p video** on a single HDMI cable. Full fidelity audio transmission to the display allows students to play embedded video segments, which are integral to their projects, and view streaming media as part of their research.

To facilitate development of group assignments, students need to meet regularly at collaboration spaces located within the lecture hall. TeamWork uses **highly reliable, wired connectivity** that prevents signal interference between collaboration systems within the same work area. This allows the university to place TeamWork systems in close proximity without connection conflicts between collaboration teams. Further, TeamWork system architecture **eliminates the need for drivers or software** to be added to student computers, making it a true plug-and-play system with most commonly available laptop or notebook computers using Windows®, Linux®, or Apple® operating systems. TeamWork facilitates collaboration without getting in the way.

Ease of operation is essential, especially with a short timeframe to research and complete the project before presenting to the class. TeamWork is **simple and intuitive**, allowing for quick operation and requiring little or no training for occasional users. To start, team members **connect a Show Me™ cable** to the video output on their laptop or tablet. As soon as an active signal is detected, the display is automatically powered on. Each time a presenter presses his or her Share button, the switcher selects the correct input and routes the student's content to the display. The Share button also lights to clearly identify which device is connected to the display. At the end of the collaboration session, team members **simply disconnect and walk away**. The display is automatically turned off and the system goes into standby mode until the next team session.

TeamWork is a fully customizable collaboration solution that can be tailored to your precise requirements. Choose from a wide range of Extron products to select the switcher, enclosure and Show Me cables or Retractors, and control processor that are best suited for your collaboration environment. Three complete, pre-configured packages are also available: **TeamWork 400**, for four digital sources; **TeamWork 600**, for six digital sources; and **TeamWork 601**, for four digital sources and two analog sources.



# TeamWork System Features

## Fully Customizable in Three Easy Steps

TeamWork systems are easily tailored to fit specific collaboration requirements in three easy steps: 1. Select a switcher 2. Select an enclosure and Show Me cables or Retractors 3. Select an Extron IP Link® control processor.

## Complete Packages Available

Complete, pre-configured packages include all necessary system components and cables for fast implementation with minimal setup required.

## Proven, Reliable Performance

TeamWork supports full resolution, full frame rate digital video up to 1080p/60, and computer video up to 1920x1200. TeamWork also passes high fidelity audio to the display. Using proven Extron switching, connectivity, and control products, TeamWork lets you focus on the task instead of the equipment.

## HDCP Compliant

TeamWork is an HDCP-compliant system. This ensures that content-protected media from team member laptops is shown properly on HDCP-compliant displays.

## Simple, Intuitive Operation

TeamWork is designed to work for you. When you connect the Show Me cable to your laptop, the display will be powered on. Press the Share button and the switcher automatically selects the appropriate input and routes content to the display. The Share button lights for easy identification. When you're done, simply disconnect and walk away. TeamWork facilitates collaboration without getting in the way.

## Plug and Play

The TeamWork system is designed for fast installation and minimal setup. Operation is plug and play. Users simply connect to the system and start collaborating, without the need to install software, drivers, or apps on their laptops or tablets.

## Works with Most Sources

TeamWork is designed to work with most laptop or notebook computers with Windows®, Mac OS®, or Linux® operating systems; and with iOS® or Android™ tablets. Any source that has a VGA, HDMI, DisplayPort, or Mini DisplayPort video output can connect to TeamWork. Analog and digital devices can be used together within the same TeamWork system.

## No Display Restrictions

The TeamWork system works with most flat-panel displays and short-throw projectors. Extron device drivers are available for use with the IP Link configurable control processor selected for your TeamWork collaboration system, and are free for download at [www.extron.com/drivers](http://www.extron.com/drivers). In addition, many flat-panel displays can be controlled directly with the IPL T PC1 or PC 101 AC Power Controllers.

## Works with Virtually any New or Existing Furniture System

TeamWork is designed to work with any classroom or business furniture system. In fact, there's a very good chance that TeamWork can be installed with the furniture system you're already using.

## Supports Legacy Analog Sources

TeamWork switchers can support legacy analog computer sources, either through direct connection with a VGA Show Me cable or with the optional TeamWork VGA

Kit. The TeamWork VGA Kit includes one VGA Show Me cable and a high performance analog-to-digital converter. Regardless of the TeamWork switcher selected, analog and digital signals are switched to the main presentation display on a single HDMI cable.

## Limited Only by Your Imagination

No matter how complex the system becomes behind the scenes, the TeamWork user interface remains straightforward. Just connect your computer or tablet and press the Share button.

## Free of Cable Clutter

Cable management is simple with an Extron Cable Cubby cable access enclosure. Cable Cubby enclosures mount flush with the tabletop and provide cable storage, AC power connection points for team member laptops, and optional USB power for tablets and other mobile devices.

## Works Around the World

TeamWork is engineered for ease of installation and operation around the world. TeamWork systems are optimized for 120 VAC/60 Hz or 220 VAC/50 Hz AC power standards. Cable Cubby Series/2 AC Power Modules are available for the US, Europe, and other major world markets. A multi-region AC power module is also available for the Middle East, South Asia, and other international trade centers.

## Service and Support

We know the value of your time and the high cost of system downtime in a learning or global business environment. That's why TeamWork is backed by Extron S3 Technical Support, the AV industry's "gold standard" for customer service.

## TEAMWORK PRE-CONFIGURED PACKAGES

PACKAGE	PART #	SHOW ME CABLES	SWITCHER	SYSTEM CONTROLLER	CABLE CUBBY	VGA-TO-HDMI CONVERTER
TeamWork 400	42-246-01	(4) HDMI	4x1 HDMI	120 VAC Edison	(1) with 2 US AC Outlets	
TeamWork 600	42-247-01	(6) HDMI	6x1 HDMI	120 VAC Edison	(1) with 4 US AC Outlets	
TeamWork 601	42-241-01	(4) HDMI, (2) VGA	6x1 HDMI	120 VAC Edison	(1); with 4 US AC Outlets	
TeamWork 601i	42-241-02	(4) HDMI, (2) VGA	6x1 HDMI	220 VAC IEC	(1); AC outlets sold separately	
TeamWork VGA Kit	42-219-01	(1) VGA				(1)

TeamWork Collaboration System Packages include all necessary cables and mounting hardware for a complete installation. TeamWork is fully customizable to meet specific collaboration requirements. For more information, please contact your Extron TeamWork representative.